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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/847,885	05/02/2001	Robert Nakayama	18564-005910	5809

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EXAMINER

TALBOT, BRIAN K

ART UNIT

PAPER NUMBER

1762

DATE MAILED: 04/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/847,885	Applicant(s) NAKAYAMA ET AL.	
	Examiner Brian K Talbot	Art Unit 1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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1. The amendment filed 2/2/04 has been considered and entered. Claims 1-22 remain in the application.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Specification

3. The disclosure is objected to because of the following informalities:

On pg. 8, the reference to US Ser. No. 09/201,999 should be updated to include that the application is now abandoned.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

4. Claims 1-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lewis et al. (5,571,401) or Lewis et al. (6,290,911) in combination with Yamagishi et al. (5,756,879), Pace (4,454,007) or Kuroiwa et al. (5,296,819).

Lewis et al. (5,571,401) or Lewis et al. (6,290,911) both teach sensor arrays for detecting analyte fluids. A sensing material comprising conducting and non-conducting material is blended to form the desired sensor. The sensing material is applied over a substrate having gold electrical contacts. The sensing material absorbs the detected material thereby providing a

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detectable response. The conductive material includes carbon black and the non-conducting polymers include a wide variety and can be applied by a variety of deposition processes including spraying and dipping. Arrays of sensors can be manufactured by these processes.

Lewis et al. (5,571,401) or Lewis et al. (6,290,911) fail to teach coating a first conductive layer and then a non-conductive layer instead of a blended composition.

Yamagishi et al. (5,756,879), Pace (4,454,007) or Kuroiwa et al. (5,296,819) all teach sensors whereby conductive electrodes are covered and connected by a conductive material. The sensors can be tailored to detect a variety of compound by altering the conductive material. These references teach coating layers over contact to form the sensors.

Therefore it would have been obvious for one skilled in the art at the time the invention was made to have modified Lewis et al. (5,571,401) or Lewis et al. (6,290,911) sensor manufacturing process by coating individual layers as evidenced by Yamagishi et al. (5,756,879), Pace (4,454,007) or Kuroiwa et al. (5,296,819) with the expectation of achieving the desired results.

It is the Examiner's position that it would have been within the skill of one practicing in the art to "tailor" the composition of the sensing material to the desired materials being detected. Hence, if one skilled in the art would utilize the wide spectrum of 100% polymer to 100% conductive material as a directed result of the material desired to be sensed. This "matter of design choice" has been deemed as an obvious modification of the prior art.

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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian K Talbot whose telephone number is (571) 272-1428. The examiner can normally be reached on Monday-Friday 6AM-3PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive P Beck can be reached on (571) 272-1415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Brian K Talbot
Primary Examiner
Art Unit 1762

BKT